


Engineer: Jack Curtis	Date: 4/22/04	 JPS Communications 5800 Departure Drive, Raleigh, NC 27616			
Drawn: Jack Curtis	Date: 4/22/04				
Approved: CTS	Date: 4/22/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 11/11/04	Size: A	Dwg. #: 5961-271136-APP	Rev: A-2	Sheet: 1 Of 1

APPLIES TO:

Motorola Maxtrac Mobile Radio (Front Connector)
Motorola Radius M100 Mobile Radio (Front Connector)
Motorola Radius M200 Mobile Radio (Front Connector)

RADIO MODIFICATIONS:

None required.

RADIO PROGRAMMING:

1. Mobile radios should normally be programmed for low transmit power.

RADIO CONTROLS:

1. Adjust the Volume Control until the yellow "SIGNAL" indicator on the associated DSP Module flashes with receive audio.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291136	(5961-271136 + 5961-261002-00)
ACU-T Interface Cable	JPS P/N 5961-281136	(5961-271136 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271136	
Radio RF Connector Type		

DSP-1 JUMPERS:

JP1	Low Impedance *
JP2	Balanced *

DSP PROGRAMMING:

(See Notes)

RX Level	7	-16dBm
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	5	2dB Boost
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

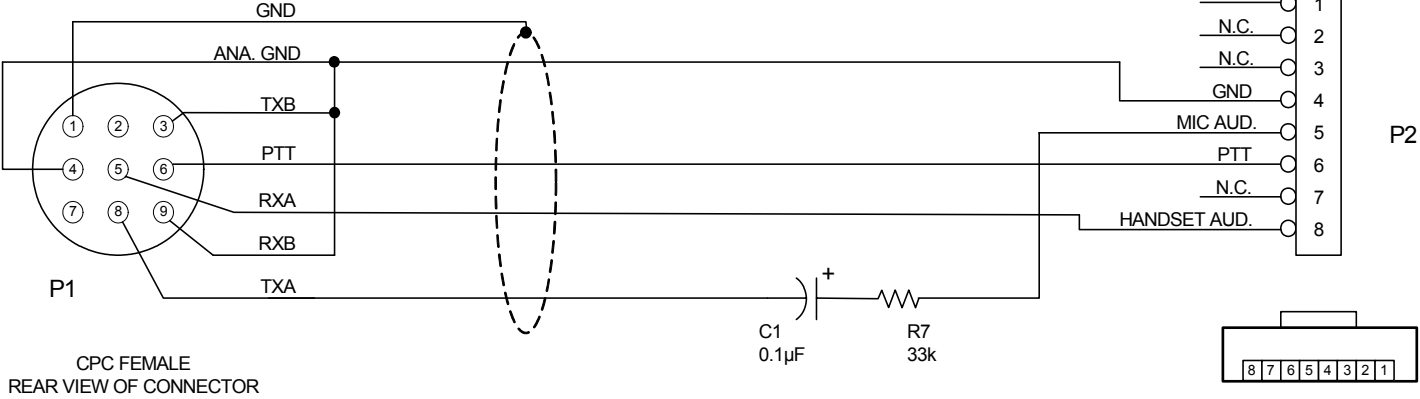
(* Indicates Default Value)

NOTES:

PURCHASED PART

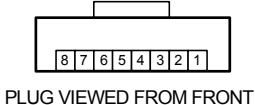
Rev	ECO	Date
A2		11-11-04

USE MOLDED CABLE
(JPS P/N 5961-261003-00)



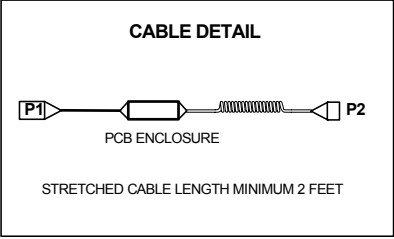
MAXTRAC CABLE
P/N 3080152H05
(JPS P/N 0314-000007)

CPC FEMALE
REAR VIEW OF CONNECTOR



PLUG VIEWED FROM FRONT

THIS CABLE CONNECTS TO THE
FRONT PANEL OF THE RADIO



CABLE DETAIL

P1 PCB ENCLOSURE P2
STRETCHED CABLE LENGTH MINIMUM 2 FEET

COMPONENT PCB (JPS P/N 5961-271000)	
C1	JPS P/N 0327-104101
R7	JPS P/N 1820-333000
JU4	
JU5	
JU6	

NOTE: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.

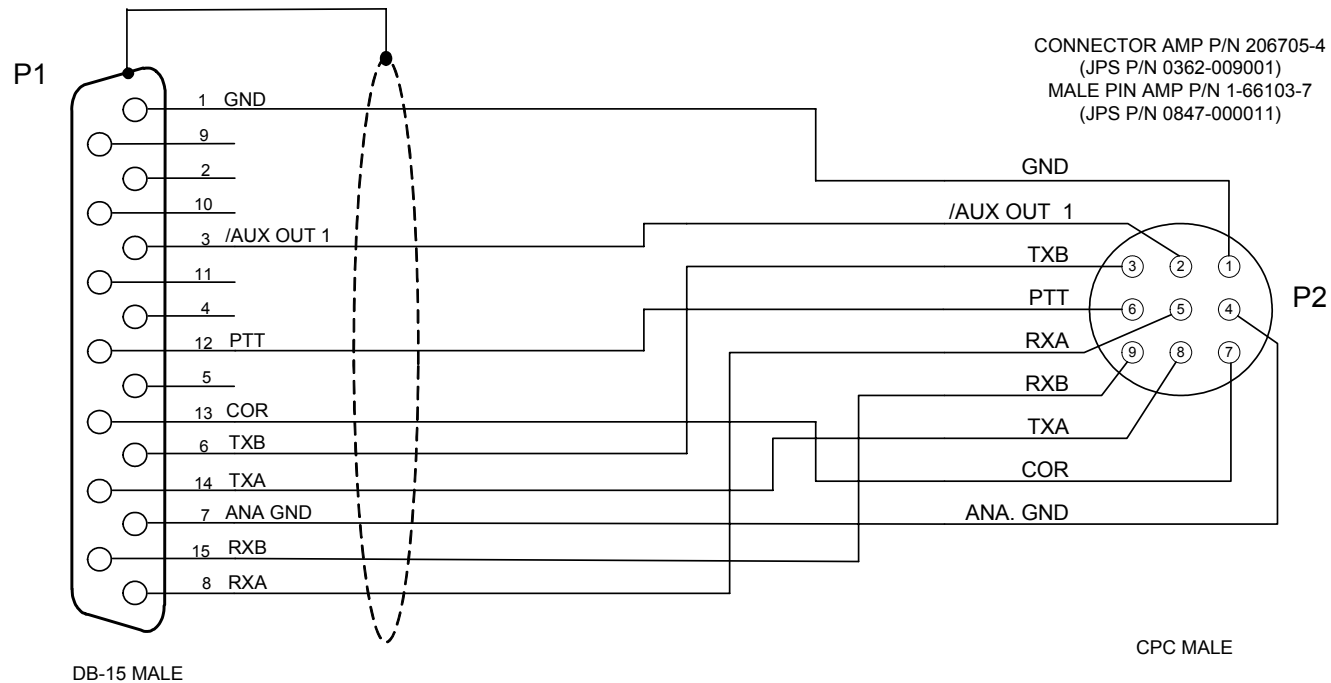
FOR DETAILED CABLE ASSEMBLY INSTRUCTIONS SEE
5961-271001-CBL.

USED WITH:
MOTOROLA MAXTRAC MOBILE (FRONT CONNECTOR)
MOTOROLA RADIUS M100 MOBILE (FRONT CONNECTOR)
MOTOROLA RADIUS M200 MOBILE (FRONT CONNECTOR)

Designed By: CTS	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: EDV	Title CABLE, CPC TO MOTOROLA MAXTRAC		
Checked By: JAC	Size A	Document Number 5961-271136	Rev A2
Issued Date NOVEMBER 4, 2003		Sheet 1 of 1	

PURCHASED PART

Rev	ECO	Date
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- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

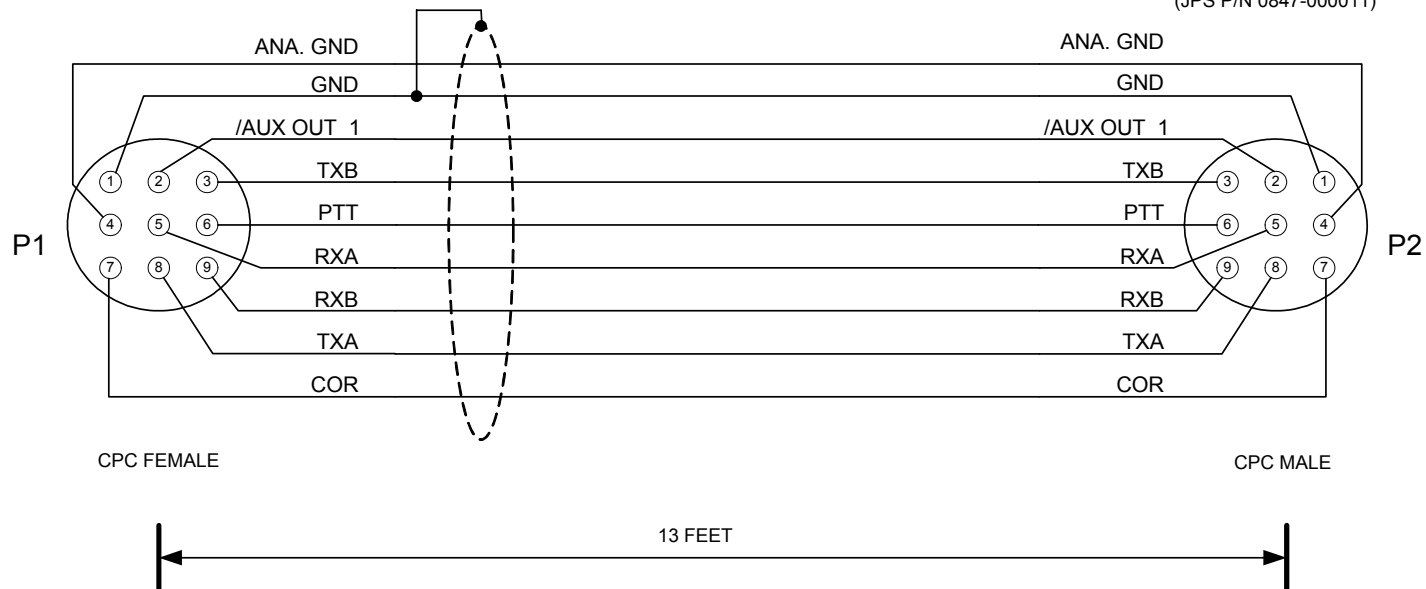
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
A		

PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	